	Table 6 – Bag Headspace Readings				
Sample	Location	Headspace Reading (ppm)			
TP-1	0-2 ft	39			
TP-2	0-2 ft	43			
TP-2	2-4 ft	142			
TP-2	4-6 ft	138			
TP-3	0-2 ft	125			
TP-3	2-4 ft	158			
TP-3	4-6 ft	125			
TP-4	0-2 ft	133			
TP-4	2-4 ft	>1,000			
TP-4	4-6 ft	>1,000			
TP-4	6-8 ft	210			
· TP-4	8-9 ft	174			
TP-5	0-2 ft	23			
TP-5	2-4 ft	56			
TP-5	4-6 ft	40			
TP-5	6-8 ft	28			
TP-5	8-10 ft	31			
TP-6	0-2 ft	39			
TP-6	2-4 ft	53			
TP-6	4-6 ft	61			
TP-6	6-8 ft	56			
TP-7	0-2 ft	50			
TP-7	2-4 ft	57			
TP-7	4-6 ft	60			
TP-8	0-2 ft	19			
TP-8	2-4 ft	44			
TP-8	4-6 ft	64			
TP-8	6-8 ft	58			
TP-9	0-2 ft	24			
TP-9	2-4 ft	60			
TP-9	4-6 ft	46			
TP-9	6-8 ft	46			
TP-10	0-2 ft	7			
TP-10	2-4 ft	25			
TP-10	4-6 ft	49			
TP-10	6-8 ft	41			
TP-10	8-10 ft	40			
HS-1	Garage floor drain sediment	12			
HS-2	Under crawl-space AST	16			
HS-3	Surface soil at SS-1	39			
HS-4	Surface soil at SS-2	29			
HS-5	Surface soil at SS-5	17			

Jacques Whitford submitted soil samples from TP-2 (2-4 feet), TP-3 (2-4 feet), and TP-4 (2-4 feet), each exhibiting the highest PID readings, for VOC and GRO testing. In addition, PCB analysis was conducted on two surface soil samples (SS-1 and SS-2) and the floor drain sediment sample (SS-3), and RCRA metals analysis was conducted on two surface soil samples (SS-4 and SS-5). Results of chemical analyses are summarized in Table 7 below; the table includes only compounds identified and their associated sampling locations.

Table 7 – Summary of Soil Sampling Results								
Analyte	Units	Table 4 Residential Criteria	Baseline - 1	Baseline - 2	TP-3, 2-4	TP-4, 2-4	SS-4	SS-5
Acetone	ug/kg	475,000	NL	NL	197	<23,400	NA	NA
n-Butylbenzene	ug/kg	NL	NL	NL	<7.1	2,570	NA	NA
Ethylbenzene	ug/kg	1,670,000	NL	NL	<7.1	5,440	NA	NA
4-Isopropyltoluene	ug/kg	NL	NL	NL	<7.1	2,100	NA	NA
Naphthalene	ug/kg	245,000	NL	NL	<7.1	16,700	NA	NA
n-Propylbenzene	ug/kg	NL	NL	NL	<7.1	3,340	NA	NA
Toluene	ug/kg	2,390,000	NL	NL	<7.1	4,320	NA	NA
1,2,4- Trimethylbenzene	ug/kg	NL	NL	NL	<7.1	50,900	NA	NA
1,3,5- Trimethylbenzene	ug/kg	NL	NL	NL	<7.1	24,400	NA	NA
m,p-Xylene	ug/kg	10,000,000	NL	NL	<14.2	26,400	NA	NA
o-Xylene	ug/kg	10,000,000	NL	NL	<7.1	2,990	NA	NA
Gasoline Range Organics	mg/kg	NL	Saturated Soil	500-1000	NA	837	NA	NA
Arsenic	mg/kg	10	NL	NL	NA	NA	12.8	15.6
Barium	mg/kg	10,000	NL	NL	NA	NA	47.4	24.1
Chromium	mg/kg	NL	NL	NL	NA	NA	15.4	17.6
Lead	mg/kg	375	NL	NL	NA	NA	34.5	49.5

Notes:

Regulatory Limits from Table 4-Remedial Action Guidelines for Contaminated Soils Residential Guideline in the MDEP Implementation of Remedial Action Guidelines Guidance Document.

Baseline - 1 and 2 refer to cleanup categories in the MDEP's Hydrocarbon Spill Decision Tree

NA denotes not analyzed

NL denotes no limit

Analytical results identified elevated gasoline constituents in TP-4, 2-4 feet; however, the concentrations were below MDEP residential soil criteria.

PCBs were not detected at concentrations above the laboratory reporting limit in SS-1, SS-2, and SS-3 (the detection limit was $30 \mu g/kg$).

Of the RCRA metals tested at two surficial soil sampling locations, only arsenic exceeded the MDEP's residential soil criteria.

5.0 DISCUSSION

As shown on Table 7, only the concentration of arsenic in two surface soil samples exceeded the Table 4 residential criteria (SS-4 and SS-5). This arsenic may be naturally occurring.

Jacques Whitford used the "MDEP Chapter 691 Rules for Underground Oil Storage Facilities Decision Tree to Establish Cleanup Standards for Petroleum-Contaminated Sites" for the Subject Site. Based on a review of site location and use, we assigned the "Baseline 2" category for the subject site (clean-up of soil to 500-1000 ppm based on PID readings).

The area within 2,000 feet downgradient and 1,000 feet upgradient is served by a public water supply. Three private water supplies are located between 450 and 600 feet upgradient from the site. Potential impact to these wells is not likely. The gasoline-impacted soils at the site appear to be located above the water table and are underlain by relatively low-permeability glaciomarine deposits. This supposition is supported by PID readings that decrease substantially with depth in TP-4 (from readings of >1000 ppm at 4-6 ft. to 174 ppm at 8-9 ft.).

The PID results from TP-4, 2-4 and 4-6 exceeded the MDEP's Baseline-2 guideline. Additional soil testing will be necessary to better delineate the extent of soils that may contain residual gasoline above the Baseline-2 guideline.

6.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the information gathered and on observations made during this investigation, the Phase I and II ESAs have revealed evidence of recognized environmental conditions associated with the Subject Site. Jacques Whitford concludes the following:

- Gasoline-impacted oil was encountered at the site in 1993 during removal of a gasoline UST; the removal was monitored by Acadia Environmental Technology. MDEP was notified of the findings and no further action was required. The recent investigation by Jacques Whitford identified gasoline-impacted soils down slope from the former tank. The concentration of residual gasoline in the soils exceeded the MDEP Baseline-2 standard.
- 2. A floor drain was observed in the garage building. According to a former owner, the drain discharges directly to the subsurface below the garage. The drain was located near an open container of petroleum and floor staining. No high PID readings or PCBs were detected in sediment in the floor drain. Nevertheless, petroleum products could have been discharged over time and released to the subsurface beneath the building. As a solid surface existed at the bottom of the drain and due to the surrounding concrete floor, collecting a subsurface soil sample in the vicinity of the drain was not performed during this phase of work.
- 3. While oil staining was apparent on the ground surface around stored parts and machinery on site, field observations during test pitting, PID screening and lab testing of soils suggests that the staining is relatively localized.

- 4. Of the 8 RCRA metals tested at two surficial soil sampling locations, only arsenic exceeded the MDEP's residential soil criteria. This arsenic may be naturally occurring.
- 5. Jacques Whitford observed suspect ACM and lead-based paint in building materials and in insulation between the walls of the 10,000-gallon aboveground storage tank (AST) at the site.

Based on the evidence of recognized environmental conditions associated with the Subject Site, Jacques Whitford recommends the following:

- 1. Completion of an asbestos survey if proposed or future renovation or demolition activities will impact suspect ACMs at the Subject Site.
- 2. Completion of concrete coring and hand augering adjoining the garage floor drain. Collection of soil samples for PID screening and analytical testing for appropriate parameters if elevated PID readings are detected.
- 3. Submission of this report and any follow-up testing to the MDEP Voluntary Response Action Program (VRAP) as a first step in obtaining a "No Action Assurance Letter."
- 4. With MDEP concurrence, removal of petroleum contaminated soil with PID readings that exceed the MDEP Baseline-2 standard. Soil removal should be preceded by investigation of the extent of impacted soils in the vicinity of the former UST (e.g., geoprobes or additional test pits).
- 5. Preparation and submission of a clean-up report to MDEP to establish "closure" status for the site and associated impacted soils identified, as well as to support the VRAP process.

7.0 CLOSURE

This report is prepared for the sole benefit of Ms. Renee Lewis. This report may not be relied upon by any other person or entity without the expressed written consent of Jacques Whitford Company, Inc. and Ms. Renee Lewis.

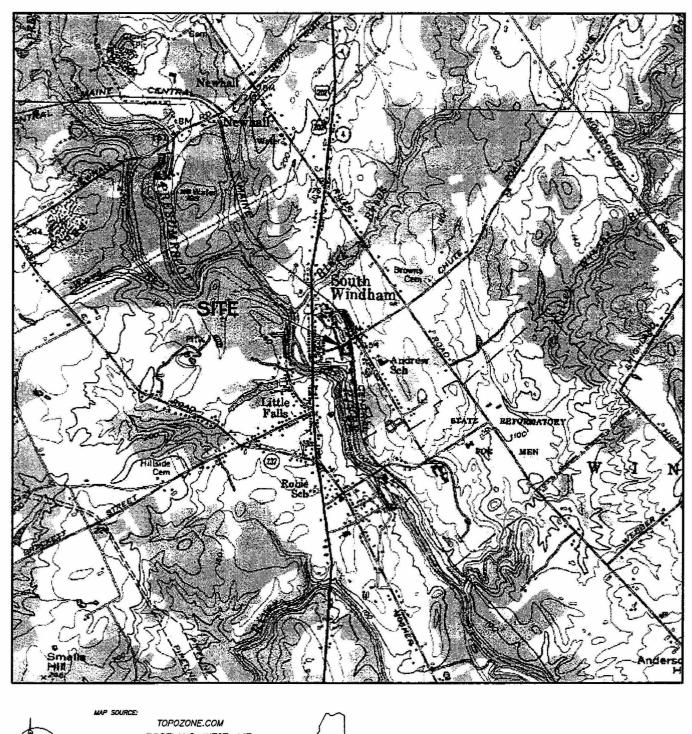
Any uses, which a third party makes of this report, or any reliance on decisions made based on it, are the responsibility of such third parties. Jacques Whitford accepts no responsibility for damages, if any suffered by any third party as a result of decisions made or actions based on this report.

Some of the information presented in this report was provided through existing documents and interviews. Although attempts were made, whenever possible, to obtain a minimum of two confirmatory sources of information, Jacques Whitford in certain instances has been required to assume that the information provided is accurate.

The conclusions presented represent the best judgement of the assessor based on current environmental standards and on the site conditions observed from April 30 to May 12, 2004. Due to the nature of investigation and the limited data available, the assessor cannot warrant against undiscovered environmental liabilities. Should additional information become available, Jacques Whitford requests that this information be brought to our attention so that we may reassess the conclusions presented herein. This report was prepared by Mr. David Chapman, C.G. and Mr. Aaron Martin and was reviewed by Mr. D. Todd Coffin, C.G.

APPENDIX 1

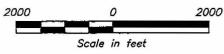
FIGURES





PORTLAND WEST, ME 1956





Jacques Whitford Company, Inc.



JACQUES WHITFORD LOCATION: PORTLAND, MAINE CHECKED BY: REVIEWED BY: 6-02-04 DVC DVC BP DRAWN BY: CHECKED BY: REVIEWED BY: REVISION DATE: PROJECT NAME/FILE NAME: DEPOT ENERGY/SITE MEP04127/2 1:24000

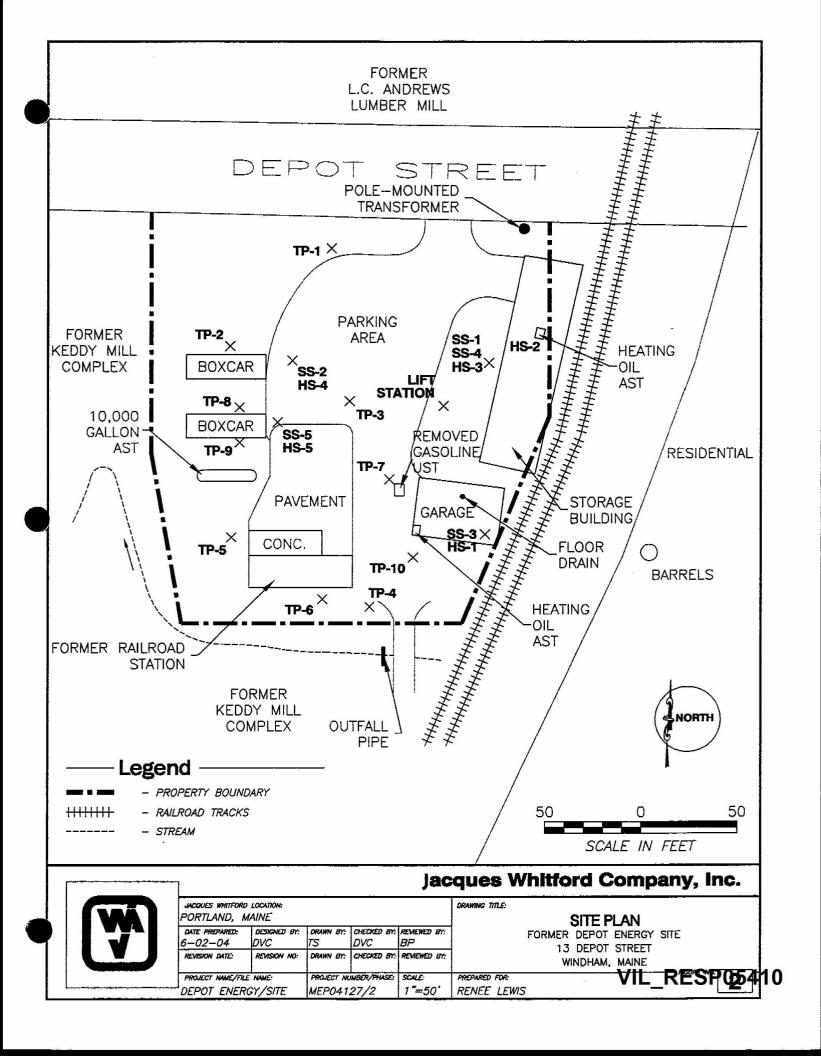
SITE LOCATION MAP

DRAWING TITLE:

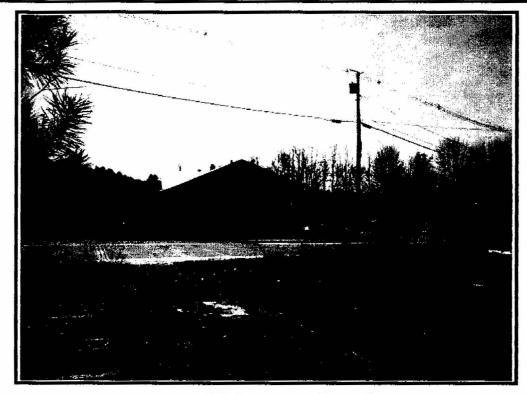
FORMER DEPOT ENERGY SITE 13 DEPOT STREET

WINDHAM, MAINE

VIL_RESP05409 PREPARED FOR RENEE LEWIS



APPENDIX 2
PHOTOGRAPHS



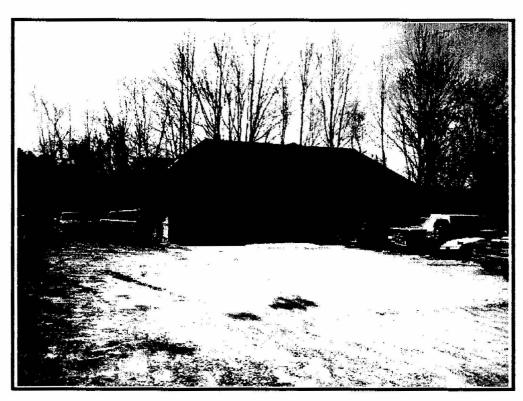
1. Subject Site from across Depot Street.



2. Warehouse building.



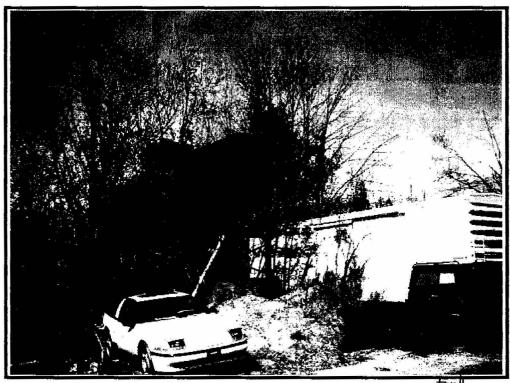
3. Garage building.



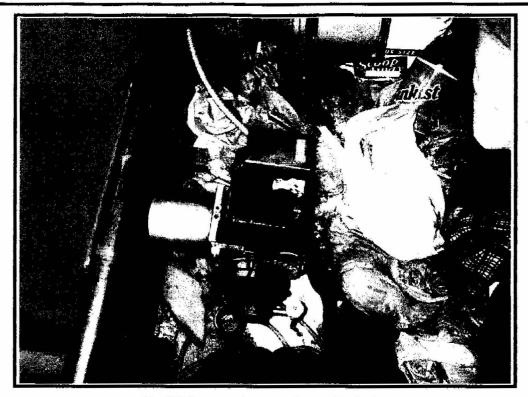
4. Storage building/former railroad station with junked autos to the left and right.



5. Boxcar used for storage of used transmissions.



6. 10,000 gallon aboveground storage tank (former-rail car).



7. Oil burner in warehouse building.



8. Heating oil AST in garage.



9. Transmissions in storage building (former train station).



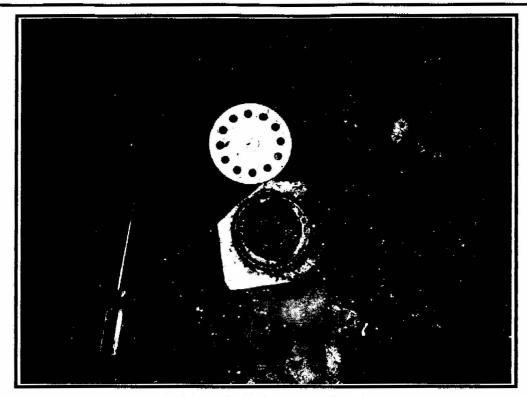
10. Used transmissions stored in warehouse building.



11. Transmissions and soil staining at SS-1 sample location. The in-ground scale is to the right.



12. Floor staining in the garage building.



13. Floor drain in garage building.



14. Barrels observed on the adjoining site to the east.

APPENDIX 3 RESOURCE INFORMATION

REGULATORY CONTACTS, PERSONS INTERVIEWED, AND HISTORICAL SOURCES

SOURCE	INFORMATION/CONTACT
Environmental Data Resources, Inc. (EDR)	Regulatory Database Search Radius Map with GeoCheck® April 26, 2004
Sanborn Fire Insurance Maps	1922, 1934, 1944 – EDR
City Directories	1967, 1971, 1978, 1982, 1984, 1990, 1996, 2000 - Maine Historical Society
Aerial Photographs	1940, 1964, 1975, 1998 – USDA Cumberland County, Maine
Other Sources	Mr. Joseph Kittrell, owner
	Mr. Denis Dancoes, real estate agent
	Windham Historical Society
	Windham Assessor's Office
	Mr. Roger Timmons, Code Enforcement Officer
	Mr. Charles Hammond, Windham Fire Chief
	Portland Water District

APPENDIX 4
ASSESSOR QUALIFICATIONS

Aaron R. Martin, B.S. Environmental Scientist

PROFILE

Aaron Martin recently began his career with Jacques Whitford as an Environmental Scientist. Studying at the Iowa Lakeside Laboratory, in conjunction with The University of Iowa; Aaron worked with his professor and four other students, to complete an wetland delineation project for a parcel of land bordering Lake Okoboji. After graduating from The University of Iowa with a B.S. in Environmental Science he was the environmental science, biology, and chemistry tutor for the student athletes at The University of Iowa. Mr. Martin also served as an intern for the U.S. Fish and Wildlife Service as a Conservation Associate at the Connecticut River Coordinator's (CRC) Office in Sunderland, Massachusetts. As an intern, he assisted the CRC staff coordinating federal, state, and private interests for the cooperative migratory fish restoration program in the Connecticut River Watershed. Aaron has also been a HVAC apprentice for Martin Heating and Cooling, and manager for Martin Oil Wholesale fuel oil in Boone, Iowa.

EDUCATION

The University of Iowa, *Iowa City, IA* B.S., Environmental Science, 2001

TRAINING AND CERTIFICATION

OSHA 40 Hour Hazardous Materials Operation Training, 2004

CAREER SUMMARY

Jacques Whitford Company Inc., Portland, ME Environmental Scientist	2004 - Present
U.S. Fish and Wildlife Service, Sunderland, MA Conservation Associate	2003 - 2004
University of Iowa Student Athletic Services, Iowa City, IA Environmental Science Tutor	2002

David V. Chapman, C.G. *Geologist*

Profile

Mr. Chapman is a hydrogeologist with more than ten years environmental consulting experience in Maine. Mr. Chapman has a bachelor's degree in geology from the University of Maine at Orono and a Master's Degree in environmental engineering from Northeastern University. He currently manages six environmental sampling projects for the Maine DEP. Mr. Chapman has extensive experience assessing and remediating contaminated sites.

Education

Northeastern University M. S. Environmental Engineering, 1987

University of Maine B. A. Geology, 1978

Career Summary

Jacques Whitford Company, Portsmouth, NH Hydrogeologist

1996 - Present

Caswell, Eichler & Hill, Inc., Portsmouth, NH Hydrogeologist

1992 - 1996

Nobis Engineering, Inc. Environmental Engineer

1991 - 1992

Acheron, Inc. Hydrogeologist

1986 - 1991

Training and Certification

40-Hour OSHA Health and Safety Training, 1983 OSHA 8-hour Refresher, Annual OSHA Supervisor Course, Asbestos Building Inspector's Course, 2000 Maine-licensed Site Evaluator #293, 1990

D. Todd Coffin, C.G. Senior Hydrogeologist

Profile

Todd Coffin is a Senior Environmental Geologist with Jacques Whitford and has fifteen years of consulting experience. Todd has managed numerous projects involving the investigation and remediation of contaminated sites. He has performed feasibility studies of remediation alternatives, conducted pilot testing and has designed and implemented full-scale remediation systems. In the mid-1980's, Todd worked for a consulting firm in Houston, Texas where he served as project hydrogeologist for the Koppers Cavalcade Superfund site. Todd returned to New England in 1 987 where he spent two years conducing contaminated site investigations and remediation in the Boston area for such clients as Shell Oil, Boston University, Avco Research Laboratory and several developers.

Education

Purdue University

M.S. Engineering Geology, 1986

Standard Oil/Shell Research Fellow, 1985

Colby College

B.A. Geology, 1983

Geology Department Prize, 1980; Dean's List; Independent Study Honors, 1983; Distinction in Major, 1983; Donald P. Lake Award, 1983.

Career Summary

Jacques Whitford, Inc., Portland, M Senior Environmental Geologist	1992 - Present
Haley & Aldrich, Inc., Scarborough, ME Senior Environmental Geologist	1987 - 1992
McBride-Ratcliff & Associates, Inc., Houston, TX Project Hydrogeologist	1985 - 1987
McClelland Engineers, Inc., Houston, TX Field Geologist	1984

Registrations

Certified Geologist, State of Maine, 1992, No. 310